PRELIMINARY FINDINGS -- COLORADO 2017 POR -- STORMWATER

Stormwater Discharges from Municipal Separate Storm Sewer Systems (COR090000)

Critical Findings

- 1. 40 CFR 122.34(b)(4)(ii)(E) requires the Permittee's Construction program (which is one of the MCMs) include procedures for receipt and consideration of information submitted by the public. The requirement was not contained in the permit.
- 2. Two standard conditions were not identified within the permit:

40 CFR 122.41(j): Monitoring and records. (1) Samples and measurements taken for the purpose of monitoring shall be representative of the monitoring activity is missing from the permit. The permit does contain the requirements in 40 CFR 122.41(j)(2-5).

40 CFR 122.41(I)(4): The permit does not require that monitoring results be reported as specified elsewhere in the permit (monitoring requirements are likely to be specified in the permittee's certification of coverage). Additionally, the permit does not require monitoring to be reported on DMRs, nor report data for pollutants that are monitored more frequently than required using approved test methods.

Recommendations

1. The permit does not specify when a discharge is authorized by the Division. The permit states:

"Following review of the application, the Division may request additional information or deny the authorization to discharge under this general permit. The applicant shall be notified of the Division's determination."

It is unclear when the authorization to discharge is granted (automatically after submission or upon issuance of the certification). Clarification should be added by specifying when authorization is granted.

- 2. The permit does not require the identification of receiving water bodies or water quality status (impaired, TMDLs). Recommend adding this as a permit requirement so the permittee is aware of any impairments or TMDLs that may apply. This recommendation is in addition any requirement to identify the receiving water(s) in the permit application/NOI.
- 3. Part I.E.2.a.iv of the permit requires the permittee implement procedures to respond to reports/identification of illicit discharges. The permit states, the permittee is not expected to actively seek out unreported illicit discharges, but is required to identify and respond to illicit discharges observed during day-to-day normal work activities. The

permittee must document and implement procedures, including the tools needed, to trace the source of an illicit discharge when identified within the MS4.

It is unclear if the permittee is not required to investigate illicit discharges observed outside of day-to-day normal work activities. Clarification could be added by specifying that all reported/known illicit discharges should be investigated and that the investigation is only required to take place during normal work hours.

General Permit for Stormwater Discharges from Construction Activity (COR400000)

Critical Findings

1. Part I.B of the permit requires the implementation of control measures to minimize the discharge of pollutants from all potential pollutant sources at the site, and that control measures be selected, designed, installed and maintained in accordance with good engineering, hydrologic and pollution control practices. The control measures include both structural and non-structural controls, including requiring the use of at least one control measure for stormwater flow from disturbed areas for which stabilization is not implemented, and that this control measure be adequately sized for the appropriate flow rate, duration, and flow conditions.

While the implementation of the requirements in Part I.B of the permit would be anticipated to include stormwater control for volume and velocity, there is no specified requirement to control stormwater volume and velocity within the site to minimize soil erosion. The permit should specify the stormwater volume and velocity be controlled to minimize soil erosion, or the fact sheet could be revised to clarify how the current permit requirements are consistent with 40 CFR 450.21(a)(1).

2. Part I.B of the permit requires the implementation of control measures to minimize the discharge of pollutants from all potential pollutant sources at the site, and that control measures be selected, designed, installed and maintained in accordance with good engineering, hydrologic and pollution control practices. The control measures include both structural and non-structural controls, including requiring the use of at least one control measure for stormwater flow from disturbed areas for which stabilization is not implemented, and that this control measure be adequately sized for the appropriate flow rate, duration, and flow conditions.

While the implementation of the requirements in Part I.B of the permit would be anticipated to include stormwater controls for peak flow rates and total stormwater volume, there is no specified requirement to control peak flow rates and total stormwater volume to minimize soil erosion at outlets and to minimize downstream channel and streambank erosion. The permit should specify peak flow rates and total

stormwater volume be controlled to minimize erosion at outlets and downstream channel and streambank erosion, or the fact sheet could be revised to clarify how the current permit requirements are consistent with 40 CFR 450.21(a)(2).

3. Part I.B.1.a.iv of the permit requires, "Temporary stabilization must be implemented for earth disturbing activities on any portion of the site where ground disturbing construction activity permanently ceased, or temporarily ceased for more than 14 calendar days." Further, the permit allows for an exception of the 14-day schedule when either the function of the specific area of the site requires it to remain disturbed, or physical characteristics of the terrain and climate prevent stabilization. In these cases, the SWMP must provide an alternate stabilization schedule.

The permit requirements differ from the federal Effluent Limitation Guideline (40 CFR 450.21(b)) in that it does not require immediate initiation of stabilization upon permanent completion of ground disturbing activity. The permit simply states that stabilization must be implemented, however does not clarify that implementation is to begin immediately upon completion. The current permit text could be interpreted to allow unspecified time for implementation, and thus the permit should be revised to specify immediate initiation of stabilization upon permanent completion of ground disturbing activities.

Further, the permit requirement does not require stabilization for temporarily ceased activity until after 14 days. The regulations require temporary stabilization if activity will not resume for a period exceeding 14 days. Thus, federal requirements would require the permittee to implement temporary stabilization on the first day it is known to the permittee that ground disturbing activity will cease for at least 14 days. However, the permit will only require implementation after 14 days have passed with no ground disturbing activity. It is recommended the permit be revised to be consistent with the federal requirements.

- 4. Part I.B.1.a.iv. of the permit establishes stabilization requirements. The permit specifies when final stabilization (not included for temporary stabilization) must be implemented and when it is considered "reached". However, the permit does not appear to specify a period of time when stabilization must be completed as per 40 CFR 450.21(b). Part I.B.2.a of the Fact Sheet (page 14) appears to indicate a time schedule of 14 days has been established to achieve temporary stabilization, however the permit text appears to only require initiation of temporary stabilization after 14 days of ceasing ground disturbing areas. There appears to be a disconnect between the federal requirements, and the implementation of them within the permit.
- 5. Three standard conditions were not identified within the permit:

- 40 CFR 122.41(e): Although the permit requires operational controls to be adequately operated and maintained, this standard condition was not observed in the permit.
 The standard provision also contains requirements for laboratory controls and the operation of back-up or auxiliary facilities that are not addressed elsewhere in the permit.
- 40 CFR 122.41(j): Analytical monitoring requirements are not established in the permit. However, it's worth noting that the monitoring and reporting standard conditions are not specified in the permit. Part I.H does require all records of all data to be retained for 3 years after expiration or inactivation of permit coverage, however fails to require representative monitoring, or specify the monitoring information that shall be included in the records, or require monitoring according to 40 CFR 136, or specify punishment for any person that falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under the permit. It should be noted that although analytical monitoring requirements are not specified in the permit, Part I.B.2.a.iii allows for the permitting authority to establish discharge monitoring requirements if a TMDL is approved for a waterbody into which a permittee discharges.
- 40 CFR 122.41(I)(4): The permit does not require that monitoring results be reported as specified elsewhere in the permit (monitoring requirements are likely to be specified in the permittee's certification of coverage). Additionally, the permit does not require monitoring to be reported on DMRs, nor report data for pollutants that are monitored more frequently than required using approved test methods.

Recommendations

- 1. Part II.B.12 requires that dischargers submit a permit renewal application at least 180 days before the permit expires if they desire to continue to discharge. Part I.A.j of the permit requires the permittee to reapply at least 90 days in advance of the permit expiration date, with some exceptions. Parts II.B.12 and I.A.1.j are inconsistent in the reapplication requirements.
- 2. In general, the permit requires the selection, installation and maintenance of control measures based on good engineering, hydrologic and pollution control practices. Specific guidance or reference documents are not included in the permit; however, example BMPs are provided. On the current Construction GP website, the State has a guidance manual titled, *Stormwater Management Plan Preparation Guidance, Revised 4/2011*. The Division may wish to include additional text requiring the consideration of this (or updated) guidance when developing the SWMP and selecting, installing, and maintaining control measures.
- 3. Part I.B.1.a. of the permit requires the selection, installation, and maintenance of control measures based on good engineering, hydrologic and pollution control practices, and

that the control measures be designed to prevent pollution or degradation of State waters. Part I.B.i.a.iv contains specific considerations for stabilization. Further sections of Part I.B.1 and I.C appear to adequately explain applicable BMP design, installation, and maintenance. Part I.B.2.a of the Fact Sheet (page 14) indicates that additional guidance is available at the State's website, titled. "Final Stabilization requirements for stormwater construction permit termination – Alternatives to the 70% plant density re-vegetation requirement". The Division may wish to include additional permit text requiring the consideration of this (or updated) guidance when selecting BMPs for stabilization.

- 4. Part. I.B.1.a.iv.(b) allows the State to approve alternative final stabilization criteria for specific operations. Examples of the final stabilization methods, including vegetative alternatives, are provided in Part I.B.1.a.iv.(c) of the permit. Part I.B.2.a of the Fact Sheet (page 14) indicates that additional guidance is available at the State's website, titled. "Final Stabilization requirements for stormwater construction permit termination Alternatives to the 70% plant density re-vegetation requirement". The federal requirements at 40 CFR 450.21(b) do not appear to be limited to "final stabilization", however the permit requirements for vegetative alternatives do appear to be limited to final stabilization, and not applicable to temporary stabilization. This is more stringent than federal requirements. It is recommended that the Division consider allowing the consideration of vegetative alternatives for temporary stabilization (in addition to final stabilization).
- 5. Part I.A.1.b.iii. and Part I.B.1.a.iii.(b) of the permit do allow for the "discharge" of concrete washwater to the ground, as long as control measures ensure washing activities do not contribute pollutants to stormwater runoff, groundwater, or state surface waters. The permit further requires that the on-site disposal of concrete washout waste is not authorized by this permit. Because the permit does not authorize the discharge of concrete washwater to commingle with stormwater, or be discharged to the groundwater and surface water, the discharge (for purposes of NPDES) appears to be effectively prohibited. Additional clarification could be added by specifying concrete washwater in Part I.A.2.a (Limitations on Coverage Discharges of Non-Stormwater).
- 6. Part I.B.1 of the Fact Sheet (page 13) states, "The general permit did not incorporate the EPA effluent limitation guideline requirement to require vehicle washout water to flow through a sediment basin or equivalent measure because this type of discharge is not authorized under the general permit. The division determined that because there is no allowable discharge, there is no need for an effluent limitation."

It is recommended that vehicle wash water be added to Part I.A.2.a (Limitations on Coverage – Discharges of Non-Stormwater) for clarification. It should be noted that this permit does allow for the "discharge" of concrete washwater to the ground, as long as control measures ensure washing activities do not contribute pollutants to stormwater runoff, groundwater, or state surface waters. The permit further requires that the on-site disposal of concrete washout waste is not authorized by this permit.

- 7. Part I.A.2.a (Limitations on Coverage Discharges of Non-Stormwater) specifies that discharges of non-stormwater, except the authorized non-stormwater discharges, are not eligible for coverage under this permit. Discharges of washout and cleanout of stucco, paint, form release oils, curing compounds and other construction materials are not allowable non-stormwater discharges, and are not eligible for coverage under this permit. Clarification could be added by specifying that these discharges are prohibited.
- 8. Part I.A.2.a (Limitations on Coverage Discharges of Non-Stormwater) specifies that discharges of non-stormwater, except the authorized non-stormwater discharges, are not eligible for coverage under this permit. Discharges of fuel, oils, or other pollutants used in vehicle and equipment operation are not allowable non-stormwater discharges, and are not eligible for coverage under this permit. Clarification could be added by specifying that these discharges are prohibited.
- 9. Part I.A.2.a (Limitations on Coverage Discharges of Non-Stormwater) specifies that discharges of non-stormwater, except the authorized non-stormwater discharges, are not eligible for coverage under this permit. Discharges of soaps or solvents used in vehicle and equipment washing are not allowable non-stormwater discharges, and are not eligible for coverage under this permit. Clarification could be added by specifying that these discharges are prohibited.
- 10. Part I.c.2.a.i of the permit requires a qualified stormwater manager be responsible for the implementation of the SWMP. Part I.D.1 requires the permittee to ensure the inspector is a qualified stormwater manager. Part I.E of the permit defines a qualified stormwater manager as, "An individual knowledgeable in the principles and practices of erosion and sediment control and pollution prevention, and with the skills to assess conditions at construction sites that could impact stormwater quality and to assess the effectiveness of stormwater controls implemented to meet the requirements of this permit." It is recommended that minimum training requirements, such as certifications, or minimum training frequencies be included in the permit for key staff the implement the SWMP. The current reference to "knowledgeable" is open to interpretation, and may result in key personnel that are not as familiar with erosion and sediment control and pollution prevention necessary to meet the requirements of the permit.
- 11. It is recommended that Part I.C.4 of the permit be revised to require the SWMP to be available onsite to staff with duties and responsibilities that may impact stormwater or result in unauthorized discharges.